

REMARKS

Upon entry of this amendment claims 1-21 are pending. Claims 22-25 are withdrawn from consideration. Claim 17 has been amended to correct an inadvertent error in its dependency introduced in the Office Action response filed December 14, 2005. Reconsideration and allowance of all pending claims is requested in view of the following remarks.

A. Information Disclosure Statement

Applicant acknowledges that the Examiner has withdrawn from consideration the Information Disclosure Statement filed May 17, 2004, in view of Applicant's admissions in the previously filed response and has made of record the Information Disclosure Statement filed by Applicant December 27, 2005.

B. Rejections under 35 U.S.C. §103

The Examiner has rejected claims 1-21 under 35 USC §103(a) as being unpatentable over U.S. Pat. No. 6,552,130 to *Makino et al.* (hereinafter *Makino*) in view of U.S. Pat. No. 6,211,259 to *Borden et al* (hereinafter *Borden*). The Examiner argues that *Makino* discloses methacrylate resins compositions that are similar to the resin composition as claimed. The Examiner admits that *Makino* is silent on a single embodiment comprising a hydroxy(meth)acrylate, and that *Makino* is silent on the specific combination of primary and secondary stabilizers as claimed. Further, the Examiner admits that *Makino* is silent on a composition comprising phosphoric acid esters. The Examiner then states that motivated by the expectation of success of improving the adhesion properties of composite materials, it would have been obvious to incorporate phosphoric or polyphosphoric acid esters disclosed by *Borden* into the composition of *Makino* to obtain the invention claims 1-21.

Applicant respectfully traverses.

In order to sustain a §103(a) rejection the combined references must teach each and every limitation of a claim, and there must be some suggestion or motivation to modify or combine the reference teachings. Further, there must be a reasonable expectation of success. The combined references do not teach each and every limitation of the claims, and there is not the suggestion or motivation to modify or combine the reference teachings as suggested by the Examiner.

Makino teaches (meth)acrylate resins for use in civil engineering and construction applications, such as coatings for concrete, asphalt and wall surfaces. *Makino* teaches three (3) different (meth)acrylate resins compositions (see for example col 2, line 46 to col 3, line 15) comprising at least components (A) a methacrylic acid ester, and (B) an acrylic polymer soluble in the component (A), with either:

- (1) component (C) a compound having a mercapto group and a carboxyl group, for example, thiosalicylic acid (see col 2, 49-50, and lines 54-67); or
- (2) component (C) in combination with component (F) an organic amine (see col 2, lines 50-51 and col 3, lines 1-8); or
- (3) a combination of component (F) an organic amine and component (G) a radical trapping agent (see col 2, lines 50-52 and col 3, lines 9-15).

That is *Makino* teaches three resin compositions that comprise (1) (A) + (B) + (C), or (2) (A) + (B) + (C) + (F) or (3) (A) + (B) + (F) + (G). Accordingly, *Makino* specifically teaches that the compositions must comprise components (C), (C) + (F) or (F) + (G). Nowhere in *Makino* is there teaching or suggestion that (meth)acrylate resin compositions can be formulated where component (C), (C) + (F) or (F) + (G) are omitted from the resin compositions comprising (A) and (B).

Applicant's invention teaches (meth)acrylate resin composition that comprises (methyl)acrylate, a polymer soluble in (meth)acrylate, paraffin, hydroxyl(meth)acrylate and a phosphoric ester as adhesion promoter. Applicant's compositions as disclosed can be advantageously used for repairing and sealing pipes, where good adhesion and leak-proofness are required properties. Applicant's invention does not teach or suggest compositions comprising either components (C), (C) + (F), or (F) + (G). These components are specifically taught and required in the resin compositions of *Makino*. Further, there is no motivation to modify or omit components (C), (C) + (F) or (F) + (G) from the (meth)acrylate resin compositions taught by *Makino*. *Makino* thus teaches away from Applicant's invention.

As admitted by the Examiner, *Makino* is silent on embodiments comprising phosphoric acid esters. As stated by the Examiner, *Borden* discloses using phosphoric or polyphosphoric acid esters to enhance adhesion properties of composite materials. The Examiner then suggests that it would be obvious to one skilled in the art, motivated by the expectation of success, to incorporate the phosphoric or polyphosphoric acid esters of *Borden* into the compositions of

Makino to obtain invention claims 1-21. In contrast to *Makino* and Applicant's invention, *Borden* teaches polyurethane compositions. Polyurethane compositions are a completely different polymer systems compared to (meth)acrylate resins. There is no teaching or suggestion provided by *Borden* that phosphoric or polyphosphoric can be utilized as adhesion promoters in (meth)acrylate resins compositions. Further, as stated by the Examiner *Makino* teaches the use of a silane coupling agent for improving the bonding strength of resin with fillers. There is no teaching, suggestion or motivation provided by *Makino* to replace the silane coupling agent of the (meth)acrylate compositions with a phosphoric or polyphosphoric acid esters as taught by Applicant's invention. Further, to replace the silane coupling agent specifically taught by *Makino* with the polyphosphoric acid esters taught by *Borden* a person skilled in the art would have to first recognize that the presence of components (C), (C) + (F) or (F) + (G) in the compositions taught by Makino may be omitted, as discussed above, and then be motivated to replace the silane coupling agent. Nowhere in *Borden* is there any motivation or suggestion provided to change or modify the compositions taught by *Makino* to omit first components (C), (C) + (F) or (F) + (G) and then replace the silane coupling agent with a polyphosphoric acid esters. Thus there is no motivation (as suggested by the Examiner) to change or modify the compositions taught by Makino with the adhesion promoters taught by *Borden*, and further *Makino* when combined with *Borden* teaches away from Applicant's invention. Applicant submits that the combined references do not teach each and every limitation of the claimed invention, and do not provide any suggestion or motivation to modify or combine the reference teachings. A *prima facie* case of obviousness under §103(a) has not been made.

Claims 2-21 depend from amended Claim 1. As discussed above the limitations of Claim 1 are not disclosed by *Makino* either alone or in combination with *Borden*. Applicant submits that the rejections under 35 U.S.C. 103(a) are traversed for at least these reasons.

Applicant submits that the Examiner's concerns have been fully addressed and respectfully requests that the rejections under 35 U.S.C. §103(a) of claims 1-21 be withdrawn.

CONCLUSION

In view of the amendments and arguments herein, reconsideration is respectfully requested. Applicants believe this case is in a condition for allowance, and respectfully requests withdrawal of the rejections and allowance of the pending claims.

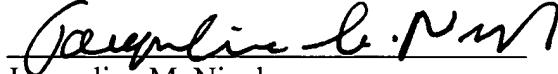
Applicant reserves the right to prosecute additional claims, including claims of broader scope, in a continuation application.

Applicants hereby petition for any extension of time which may be required to maintain the pendency of this case, and any required fee, except the Issue Fee, for such extension is to be charged to **Deposit Account No. 19-3878**.

The Examiner is invited to telephone the undersigned at the number listed below if it would in any way advance prosecution of this case.

Respectfully submitted,

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